

WEST Search History

DATE: Thursday, April 26, 2007

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		<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=NO; OP=ADJ</i>	
<input type="checkbox"/>	L30	20010004108	2
<input type="checkbox"/>	L23	20010004108 or 20040054196 or wo-200294805-\$.did. or us-5976407 or 20030052305 or de-1927350-\$.did.	7
<input type="checkbox"/>	L22	L21 and l8	2
<input type="checkbox"/>	L21	20040021128	3
<input type="checkbox"/>	L20	L19 and l18	46
<input type="checkbox"/>	L19	428/1.1 or 252/299.01 or 252/299.63	4651
<input type="checkbox"/>	L18	L8 same liquid crystal\$	111
<input type="checkbox"/>	L13	20040173775	2
<input type="checkbox"/>	L12	L11 and l8	2
<input type="checkbox"/>	L11	cgu-?-F or cczu-?-F	201
<input type="checkbox"/>	L10	L9 and l8	3
<input type="checkbox"/>	L9	ccp-?F?F?F	198
<input type="checkbox"/>	L8	(medium or composit\$ or mixture\$) same (pitch with nm)	1240
<input type="checkbox"/>	L7	L6 and l5	2
<input type="checkbox"/>	L6	vhr or voltage holding ratio	1251
<input type="checkbox"/>	L5	pitch with nm	6478
<input type="checkbox"/>	L1	20060027784	2

END OF SEARCH HISTORY

The helical twisting power (HTP) of a chiral compound which induces a helically twisted superstructure in a liquid-crystalline mixture is given by the equation $HTP = (p \cdot c)^{-1} [\mu\text{m}^{-1}]$. In this equation, p denotes the helical pitch of the helically twisted phase in μm , and c denotes the concentration of the chiral compound (a value of 0.01 for c corresponds, for example, to a concentration of 1% by weight). Unless indicated otherwise, HTP values above and below relate to a temperature of 20°C and the commercially available neutral nematic TN host mixture MLC-6260 (Merck KGaA, Darmstadt).

The physical parameters were determined experimentally in accordance with "Licristal, Physical Properties Of Liquid Crystals, Description of the measurement methods", Ed. W. Becker, Merck KGaA, Darmstadt, revised edition, 1998.

Example 1

A cholesteric mixture C1 comprises 97.9% of a nematic component N1 consisting of

CCP-2OCF3	3.0 %	cl.p.	80.5
CCP-3OCF3	3.0 %	Δn	0.1032
CCP-2F.F.F	10.0 %	n_e	1.5906
CCP-3F.F.F	10.0 %	$\Delta \epsilon$	+12.4
CCP-5F.F.F	4.0 %	γ_1	176
BCH-2F.F	7.0 %		
BCH-3F.F	7.0 %		
BCH-3F.F.F	13.0 %		
CGU-2-F	7.0 %		
CGU-3-F	7.0 %		
CCZU-2-F	3.0 %		
CCZU-3-F	15.0 %		
CCZU-5-F	3.0 %		
CCGU-3-F	8.0 %		

and 2.1% of a chiral compound of the following formula:

0.25 μm